

Treatment effect estimation

Julian Bernado

Now, let's assume that we've done matching at two levels:

1. Matched schools to schools
2. Matched students to students within those schools

As such, let's imagine a dataset indexed by school i and student j with four variables: * T_{ij} : treatment indicator for student j , uniform within an i , in $\{0, 1\}$. * Y_{ij} : actual outcome for student j , within \mathbb{R} * \hat{Y}_{ij} : estimated outcome for student j , within \mathbb{R} * S_{ij} : school, within $[S]$

Then, we want to estimate treatment by the following specification as in propertee:

```
# output <- lmitt(Y ~ 1, data = df, specification = Treatment ~ block(student_match) + uoa(
# spec <- obs_spec(Treatment ~ cluster(Group) + block(school_match), data = df)
# output@StudySpecification <- spec
# print(summary(output))
```

as debugged by Ben and Julian on September 22nd.